Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Recommendations Approved By The	)	IB Docket No. 04-286
Advisory Committee For The 2007 World	)	
Radiocommunication Conference	)	

COMMENTS OF INTEL CORPORATION

Intel is pleased to provide comments on the recommendations from the FCC's WRC Advisory Committee ("WAC") in the above-referenced proceeding and wishes to comment on the two proposals where agreement was not reached within the WAC: Document WAC/148(13.12.06) addressing the 698-806 MHz band and the bands currently identified for IMT-2000, and Document WAC/149(13.12.06) addressing the 3650-3700 MHz band, both under WRC-07 agenda item 1.4.

Intel is the world's largest semiconductor manufacturer and a leader in technical innovation. Intel is also a leading manufacturer of communications and networking chips and equipment. Intel has been an active participant in the ITU-R activities directly related to these items since 2001.

3650-3700 MHz BAND

With respect to document WAC/149(13.12.06), addressing the 3650-3700 MHz band, Intel supports View B that proposes that the US have no proposal to 3650-3700 MHz under Agenda Item 1.4. The FCC developed an extensive public record on this band in multiple proceedings, with the finding that it was in fact possible to domestically share the band

between advanced wireless services and incumbent FSS. Therefore it would have been entirely appropriate for the US to propose a change to the allocation to expand terrestrial use of the band. However as a concession View B proposes that the US remain silent. Accordingly as View B is the minimum the US can do and remain consistent with domestic policy, Intel strongly supports View B.

METHOD FOR IDENTIFICATION OF SPECTRUM FOR ADVANCED WIRELESS SERVICES

With respect to Document WAC/148(13.12.06) there are two opposing views. View A proposes that the 698-806 MHz band, and the bands currently identified for IMT-2000, should be identified for "IMT", which is defined as both "IMT-2000" and "IMT-Advanced."[1] View B proposes that 698-806 MHz, and the bands currently identified for IMT-2000, should all be identified in a broader, more inclusive fashion by use of the term: "IMT and other broadband wireless access systems."

Supporters of View A largely represent incumbents with vested interests in those technologies currently identified as IMT-2000, while proponents of View B largely represent those entities wishing to deploy technologies not currently identified as IMT-2000. Importantly, a new radio interface has not been added to the IMT-2000 family since 1999.

Policy and Precedential Considerations

First, Intel believes the U.S. should vigorously advocate the position proposed in View B because it will advance the well establised U.S. policy of giving operators more

[1] IMT-Advanced is the terminology developed within ITU-R Working Party 8F to basically refer to "systems beyond IMT-2000." Similar to that term, the systems/technologies that will make up IMT-Advanced are currently not specified.

choice with regard to the technologies they may deploy in a particular band (technology neutrality).

Second, notwithstanding the unsubstantiated statements of its proponents that "*View A is consistent with long-standing U.S. positions at previous WRCs and within ITU-R Working Party 8F,* "[2] the U.S. advocated positions almost identical to View B in past WRCs. In 2000 recognizing that the linking of frequency bands with specific technologies was contrary to the fundamental U.S. policy of technology neutrality, the U.S. proposed a broadening of the identification to WRC'00 stating in relevant part:

> *the United States believes that it is essential not to tie specific technologies to specific frequency bands. In keeping with its technology-neutral belief that existing mobile operators should be free to evolve to IMT-2000 and beyond as the market demands, the United States has proposed several bands for the terrestrial and satellite components of IMT-2000 that are already allocated for mobile and mobile-satellite services. IMT-2000 and other advanced communication applications will naturally evolve from existing technologies in response to market demand, allowing current operators and new licensees in existing mobile and mobile-satellite bands to bring advanced services to consumers as rapidly as new technology allows. This approach has the advantage of not artificially tying the rollout of new technology and service to new spectrum as administrations assess their ability to use that spectrum for IMT-2000 and other advanced communication applications. Although ITU plays an invaluable role in facilitating IMT-2000 and other advanced communication applications, it will be administrations, technology developers,*

[2] Ex Parte Presentation IB Docket No. 04-286; "WRC-07 Advisory Committee"; http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6518722357

equipment manufacturers and service providers that will ultimately decide when to introduce IMT-2000 and other advanced communication applications based on market factors. The United States believes that support for this evolutionary approach in existing mobile bands will likely lead to a more expeditious implementation of IMT-2000 and other advanced communication applications in bands that overlap globally.[3]

The US contribution to WRC 2000 then proposed specific changes to the relevant footnotes and resolutions, broadening the identification from IMT-2000 to include "and other advanced communication applications".

In addition, with regard to ITU-R Working Party 8F (the lead group on agenda item 1.4) the US supported the retention in WP8F Draft CPM text for Agenda Item 1.4[4] of multiple methods addressing the footnotes including vigorously supporting "Method 3", copied below from the DRAFT CPM REPORT:

Method 3: *No specific identification of additional spectrum within RR Article **5** for IMT, but any additional spectrum could come from spectrum with a primary mobile allocation in RR Article **5** or a new primary allocation to mobile. A WRC Resolution or Recommendation may be prepared to provide the principles and conditions on the use of the frequency bands suitable for IMT. The Resolution or Recommendation would also broadly address frequency ranges associated with IMT. The status of*

[3] Proposal of US to WRC 2000, document [12-a3] United States of America - PROPOSALS FOR THE WORK OF THE CONFERENCE: PROPOSAL FOR TERRESTRIAL AND SATELLITE COMPONENTS OF IMT-2000; http://www.itu.int/itudoc/itu-r/archives/wrc/wrc-2000/docs/1-99/12-a3.html

[4] See WP8F R03-WP8F-C-1045!H05-P3!MSW-E @

existing IMT-2000 footnotes would need to be addressed.[5]

This method advocates the complete removal in the Radio Regulations of footnotes specifically identifying spectrum for IMT-2000. As articulated in the "Advantages" following it this method is in fact the most technology neutral, and most aligned with fundamental US policy.:

Advantages

- *For additional spectrum and possibly for existing IMT-2000 spectrum, supports flexibility to deploy the most suitable mobile technology in any band allocated for the MS with no designated technology.*[6]

It is therefore critical to note that the proposal put forward in View B is already represents a concession from the most technology neutral position. Accordingly it is imperative that the US vigorously promote View B as a means to retain some semblance of technology neutrality in the identification of this critical spectrum.

Finally, in the event the U.S. fears in 2000 have been borne out. In the United States service providers have already chosen to deploy new innovative wireless technologies not currently identified as IMT-2000. These U.S. companies currently cannot fully benefit from a global market because even though there is great momentum towards technology neutral policies, many countries give great weight to ITU-R Recommendations and still restrict access to spectrum bands identified with IMT-2000 to those technologies defined in M.1457.

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[5] CPM Report on technical, operational and regulatory/procedural matters to be considered by the 2007 World Radiocommunication Conference @ 29; http://www.itu.int/md/R07-CPM-C-0001/en

[6] ibid

Diplomatic Considerations

Given that the US was unsuccessful in 2000 concern may be raised that the U.S. will be able to successfully advocate View B at WRC'07. Intel believes that the passage of time now creates a much more favorable environment to pursue such a position.

First, at the time of WRC 2000 the policy of "technology neutrality" was not as widely accepted among leading policy makers. Since that time, however, do in part to the success of the U.S. economy, there has been broad acceptance of it soundness:

a. from regional regulatory bodies such as the European Commission which has stated: "*owners of spectrum usage rights should not be unduly constrained but subject to certain safeguards, have the freedom to provide any type of electronic communications service ('service neutrality') using any technology or standard under common conditions('technological neutrality')*."[7]; to

b. the largest mobile operator in the world, Vodafone "*Vodafone strongly supports the Commission's proposal that there is a presumption in favor of service and technology neutrality. …. The general case for service and technology neutrality is already well understood: it allows individual firms, rather than Governments, to determine how best to exploit their spectrum.*

[7] Communication on the Review of the EU Regulatory Framework for electronic communications networks and services;http://ec.europa.eu/information_society/policy/ecomm/doc/info_centre/public_consult/review/com334_en.pdf ; @7

…We can think of no other aspect of spectrum reform which offers such substantial and such tangible benefits for Europe."[8]

c. To administrations as diverse as Australia, India, and Guatemala.

Second, numerous administrations are now confronted with the situation of operators wishing to deploy new innovative technologies, but which the ITU-R WP8F has failed to include in Recommendation M.1457.

Finally, the term "advanced communication applications" was not defined in the ITU-R, which made approval of its use in the Radio Regulations problematic. However since that time the ITU-R has developed its own, broader definition "broadband wireless access systems" which includes not only IMT-2000 systems, but additional newer technologies. Similar to Recommendation ITU-R M.1457 for IMT-2000, the radio access technologies for broadband wireless access systems have been captured in ITU-R Recommendations.[9] The use of this ITU-R term will be much more acceptable to administrations.

Conclusion

It is imperative that the U.S. support reforming this key area of the Radio Regulations. This technology neutral position, first put forward by the U.S. in 2000 and now proven correct by subsequent events, has growing momentum and should be well received by many administrations. Success will advance a primary U.S. goal of fostering

[8] Comments of Vodafone to Communication on the Review of the EU Regulatory Framework for electronic communications networks and services @7; http://ec.europa.eu/information_society/policy/ecomm/doc/info_centre/public_consult/review_2/comments/vodafone_final_submission_10102006.pdf

[9] Specifically, in Recommendation ITU-R F.1763 for fixed applications and Recommendation ITU-R M.[8A/BWA].

pro-competitive and flexible policy environments that bring the benefits of ICTs to the global community and opening foreign markets to U.S. telecommunications and information technology companies.

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Respectfully submitted,

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